

## **REMARKS/ARGUMENTS**

Claims 1-42 are pending in the application.

### **Claim Objection**

The Office Action objects to the term “substantially” in Claim 39 for rendering the claim indefinite. Applicant respectfully submits that the term “substantially” is properly used in the context of Claim 39 in accordance with the MPEP. (See MPEP 2173.05(b)(D)). Applicant requests that the claim objection be withdrawn.

### **35 U.S.C. § 103 - Ansell**

Claims 1-42 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ansell et al. (USPN 6,367,019) (hereinafter "Ansell") in view of Hertzberg et al. (USPN 5,745,678) (hereinafter “Hertzberg”). Applicant respectfully submits that Claims 1-42 are patentable over Ansell and Hertzberg.

Claim 1 recites:

A method comprising:  
randomly retrieving data from a removable data storage medium,  
wherein the removable data storage medium contains an executable application program;  
comparing the retrieved data to corresponding verification data,  
wherein the verification data is known to be valid; and  
allowing execution of the executable application program if the  
retrieved data matches the corresponding verification data.

Ansell describes a technique for providing copy security for portable music. In particular, Ansell teaches the use of a master media key to encrypt audio data.

The master media key is then encrypted with a storage key unique to an external player. (See Ansell, col. 2, lines 14-51). Ansell suggests that one of the keys may be included in a storage medium along with the audio data. (See Ansell, Claim 44). Thus, Ansell provides enhanced security for audio data by implementing two layers of encryption using two different keys where one of the keys may be included in the data.

Applicant respectfully submits that the technique described in Ansell is significantly different from the method recited in Claim 1. Particularly, the method in Claim 1 includes “randomly retrieving data from a removable data storage medium” and “comparing the retrieved data to corresponding verification data”. Neither of these steps is disclosed or suggested by Ansell.

The Office Action admits that Ansell does not explicitly teach randomly retrieving data as recited in Claim 1. However, the Office Action argues that Hertzberg teaches such a step. (Office Action, page 3, paragraph 4.2). Hertzberg describes a method and system for the secured distribution of multimedia titles. In particular, Hertzberg teaches a technique for embedding a validation structure in a multimedia program for validating the program. Regarding the validation structure, Hertzberg states:

In creating the validating structure, sections of the program (hereinafter called data objects) are selected and a cryptographic value is created or calculated on each of the selected data objects. (Hertzberg, col. 1, lines 61-64).

Thus, sections of the program are pre-selected for use in the validating structure.

Concerning the use of the validating structure, Hertzberg states:

Determining whether a multimedia program is an authorized multimedia program is accomplished by selecting a subset of the data objects within the multimedia program and validating the selected data objects using the validation structure stored in the multimedia program. This includes the steps of randomly selecting a portion of the data objects from among a defined set of data records listed in the validating structure, reading the selected data objects from the multimedia program using location information stored in the validating structure, and validating the selected data objects using validation information stored in the validation structure. (Hertzberg, col. 2, lines 4-14)

Accordingly, Hertzberg teaches randomly selecting data objects only from the pre-selected sections of the program specified in the validation structure. Assuming that the program in Hertzberg can be stored in a removable data storage medium, the technique described in Hertzberg would not be able to perform “randomly retrieving data from a removable data storage medium” because only the pre-selected sections specified in the validation structure can be selected for use in the validation process.

Thus, even if Ansell and Hertzberg can be combined, the combination merely yields a technique for securing data that includes keys embedded in the data and the use of a pre-selected portion of the data for validation. However, this technique would not include the steps recited in Claim 1.

For at least the above-identified reasons, Applicant respectfully submits that Claim 1 is patentable over Ansell and Hertzberg, alone or in combination, and is allowable. Given that Claims 2-9 depend from Claim 1, Claims 2-9 are also allowable for at least the same reasons.

Claims 7 and 8 recite:

7. A method as recited in claim 1 further including partitioning the removable data storage medium into a plurality of data blocks.

8. A method as recited in claim 1 further including:  
partitioning the removable data storage medium into a plurality of data blocks; and  
calculating a cryptographic digest for each of the plurality of data blocks.

Neither Ansell nor Hertzberg describes a method that includes the steps recited in these claims. The Office Action cites the materials in Ansell at col. 5, line 47 through col. 7 for rejecting Claims 7 and 8. (See Office Action, page 7). Applicant has reviewed these three columns of cited materials in Ansell and found that none of the materials discloses or suggests “partitioning the removable data storage medium into a plurality of data blocks”, as recited in the claims. Accordingly, Applicant respectfully submits that Claims 7 and 8 are patentable over Ansell and Hertzberg, by itself or in combination, for at least this additional reason.

Claim 10 recites

A method comprising:  
randomly retrieving data from a removable data storage medium, wherein the removable data storage medium contains at least one file of audio data;  
comparing the retrieved data to corresponding verification data, wherein the verification data is known to be valid; and  
allowing access to the at least one file of audio data if the retrieved data matches the corresponding verification data.

Claim 10 stands rejected under essentially the same reasons given by the Office Action for rejecting Claim 1. Both Ansell and Hertzberg describe audio data. However, as discussed above, neither Ansell nor Hertzberg discloses

randomly retrieving data from a removable data storage medium and comparing the retrieved data to corresponding verification data, as recited in Claim 10. Thus, for the reasons stated above, Applicant respectfully submits that Claim 10 is patentable over Ansell and Hertzberg, alone or in combination, and is allowable. Given that Claims 11-16 depend from Claim 10, Claims 11-16 are also allowable for at least the same reasons.

Claim 17 recites:

A method of verifying the presence of a legitimate removable data storage medium, the method comprising:  
randomly retrieving at least one data block from the removable data storage medium, wherein the removable data storage medium contains a plurality of data blocks;  
comparing the retrieved data block to a corresponding verification data block, wherein the verification data block is known to be valid; and  
determining that a legitimate removable data storage medium is present if the retrieved data block matches the corresponding verification data block.

As discussed above, Hertzberg merely describes the use of a pre-selected portion of data specified in a validation structure for validating a multimedia program that contains the data. However, neither Ansell nor Hertzberg discloses or suggests “randomly retrieving at least one data block from the removable data storage medium” and “comparing the retrieved data block to a corresponding verification data block”, as recited in Claim 17. For the reasons stated above, Applicant respectfully submits that Claim 17 is allowable over Ansell and Hertzberg, by itself or in combination. Given that Claims 18-23 depend from Claim 17, Claims 18-23 are also allowable over Ansell and Hertzberg for at least the same reasons.

Claims 24 and 30 recite:

24. A verification system comprising:  
a data reading device to read data from a removable data storage medium; and  
a verification module coupled to the data reading device, wherein the verification module is to randomly retrieve data from the removable data storage medium and compare the retrieved data to corresponding verification data that is known to be valid, and wherein the verification module is further to determine that a legitimate removable data storage medium is present if the retrieved data matches the corresponding verification data.

30. One or more computer-readable media having stored thereon a computer program comprising the following steps:  
randomly retrieving data from a removable data storage medium;  
comparing the retrieved data to corresponding verification data, wherein the verification data is known to be valid; and  
determining that a legitimate removable data storage medium is present if the retrieved data matches the corresponding verification data.

Claims 24 and 30 stand rejected under the same reasons given by the Office Action for rejecting Claim 1. As discussed above, even if Ansell and Hertzberg can be combined, the combination merely teaches a technique for securing data that includes keys embedded in the data and the use of a pre-selected portion of the data for validation. However, neither Ansell nor Hertzberg discloses randomly retrieving data from a removable data storage medium and comparing the retrieved data to corresponding verification data, as recited in Claim 30. Accordingly, the references also fail to disclose the verification module as recited in Claim 24. For the reasons stated above, Applicant respectfully submits that

independent Claims 24 and 30 and dependent Claims 25-29 and 31-33 are patentable over Ansell and Hertzberg, alone or in combination, and are allowable.

Claim 34 recites:

A method comprising:  
randomly selecting a data block identifier, wherein the data block identifier identifies a particular data block on a removable data storage medium;  
issuing a challenge and the data block identifier to a data reading device, wherein the removable data storage medium is readable by the data reading device;  
the data reading device hashing the challenge with the data contained in the particular data block on the removable data storage medium;  
receiving the result of the hashing operation;  
comparing the result of the hashing operation to corresponding verification data, wherein the verification data is known to be valid; and  
determining that the removable data storage medium is legitimate if the result of the hashing operation matches the corresponding verification data.

As discussed above, Ansell fails to disclose randomly selecting data.

Hertzberg teaches randomly selecting data objects only from pre-selected sections of a program specified in a validation structure. However, Hertzberg does not disclose or suggest “randomly selecting a data block identifier, wherein the data block identifier identifies a particular data block on a removable data storage medium”. Furthermore, neither Hertzberg nor Ansell discloses or suggests issuing a challenge or hashing the challenge with the data contained in the particular data block, as recited in Claim 34. Thus, for the reasons stated above, Applicant respectfully submits that independent Claim 34 and dependent Claims 35-38 are patentable over Ansell and Hertzberg, alone or in combination, and are allowable.

Claim 39 recites:

A method for validating a storage medium comprising:  
partitioning data stored in the storage medium into data blocks;  
randomly retrieving at least one of the data block;  
performing an operating on the retrieved data block to obtain a first digest;  
obtaining a second digest associated with the retrieved data block,  
the second digest associated with data that is known to be valid; and  
if the first digest substantially matches the second digest,  
determining that the storage medium is valid.

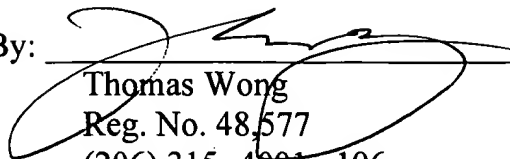
As stated above, neither Hertzberg nor Ansell discloses or suggests “partitioning data stored in the storage medium into data blocks” or “randomly retrieving at least one of the data block”, as recited in Claim 39. For the reasons stated above, Applicant respectfully submits that independent Claim 39 and dependent Claims 40-42 are patentable over Ansell and Hertzberg, alone or in combination, and are allowable.

### **Conclusion**

Claims 1-42 are now in condition for allowance. Applicant respectfully requests the issuance of the subject application. Should any matter in this case remain unresolved, the undersigned attorney respectfully requests a telephone conference with the Examiner to resolve any such outstanding matter.

Respectfully Submitted,

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